

Claims

1. A method for providing a digital video image to a display device, said method comprising the steps of:

receiving a digital signal in a predefined video format from a service provider;

comparing said predefined video format to a plurality of stored video formats supported by the display device;

if said predefined video format matches one of the plurality of stored video formats supported by the display device, transmitting a decoded output signal to the display device in said predefined video format for displaying the digital video image thereon; and

if said predefined video format does not match one of the plurality of stored video formats supported by the display device, transmitting a decoded output signal to the display device in a selected one of the plurality of stored video formats that is selected at least in part based on said predefined video format.

2. The method of claim 1 wherein said predefined video format is selected from the group consisting of 1080I, 720P, 480P and 480I formats.

3. The method of claim 1 wherein said selected one of the plurality of stored video formats is a next best available format that is determined in accordance with predefined criteria.

4. The method of claim 1 wherein said receiving, comparing and transmitting steps are performed by a digital set-top terminal.

5. The method of claim 4 wherein said digital set-top box supports an analog video format.

6. The method of claim 1 wherein said display device is a digital television receiver.

7. A method for determining at least one video format of a digital video signal that is supported by a display device, said method comprising the steps of:
 - a. displaying an onscreen message to the display device in accordance with a first video format;
 - b. storing the first video format if a user response to the message is received within a predetermined time period, said stored first video format being supported by the display device;
 - c. displaying the onscreen message to the display device in accordance with a second video format after expiration of the predetermined time period or after receiving the user response.
8. The method of claim 7 further comprising the steps of repeating steps (a)-(c) for all available video formats.
9. The method of claim 7 further comprising the step of entering a setup mode in which the at least one video format supported by the display device is determined.
10. The method of claim 7 wherein said onscreen message includes a user instruction informing a user to indicate that the first video format is supported by the display device if the message is understood.
11. The method of claim 7 wherein said display device is a digital television receiver.
12. The method of claim 10 wherein said onscreen message includes an image that allows the user to determine that the message is being correctly displayed.
13. The method of claim 12 wherein said image is a predefined color.
14. The method of claim 12 wherein said image is a predefined shape.

15. The method of claim 12 wherein said image is a predefined shape and color.

16. The method of claim 7 wherein the first video format is stored in nonvolatile memory.

17. The method of claim 7 wherein said user response is entered via a keypad.

18. The method of claim 7 wherein said first video format is selected from the group consisting of 1080I, 720P, 480P and 480I formats.

19. The method of claim 7 wherein said displaying and storing steps are performed by a digital set-top terminal.

20. The method of claim 19 wherein said digital set-top terminal supports analog video format.

21. An apparatus for use with a digital television receiver, comprising:
a digital tuner for receiving a digital television signal in a predefined video format from a service provider;
a video decoder for receiving the digital television signal from the digital tuner and providing to the digital television receiver a video output signal;
a user interface coupled to the video decoder;
an onscreen display processor for determining with user input via the user interface a plurality of video formats that are supported by the digital television receiver; and

wherein said video decoder provides the video output signal to the digital television receiver in said predefined format if said predefined video format matches one of said plurality of video formats supported by the digital television receiver and provides the video output signal to the digital television receiver in a selected one of the plurality of video formats supported by the digital television receiver if said predefined video

format does not match one of the plurality of video formats supported by the digital television receiver.

22. The apparatus of claim 21 wherein said predefined video format is selected from the group consisting of 1080I, 720P, 480P and 480I formats.

23. The apparatus of claim 21 wherein said selected one of the plurality of stored video formats is a next best available format that is determined in accordance with predefined criteria.

24. The apparatus of claim 21 wherein said onscreen display processor

a. displays an onscreen message to the digital television receiver in accordance with a first video format;

b. stores the first video format if a user response to the message is received via the user interface within a predetermined time period, said stored first video format being supported by the digital television receiver;

c. displays the onscreen message to the digital television receiver in accordance with a second video format after expiration of the predetermined time period or after receiving the user response.

25. The apparatus of claim 24 wherein said onscreen display processor enters a setup mode in which the at least one video format supported by the digital television receiver is determined.

26. The apparatus of claim 24 wherein said onscreen message includes a user instruction informing a user to indicate that the first video format is supported by the digital television receiver if the message is understood.

27. The apparatus of claim 24 wherein said onscreen message includes an image that allows the user to determine that the message is being correctly displayed.

28. The apparatus of claim 27 wherein said image is a predefined color.

29. The apparatus of claim 27 wherein said image is a predefined shape.
30. The apparatus of claim 27 wherein said image is a predefined shape and color.
31. The apparatus of claim 24 wherein the first video format is stored in nonvolatile memory.
32. The apparatus of claim 21 wherein said user interface includes a keypad.
33. The apparatus of claim 21 wherein said predefined video format is selected from the group consisting of 1080I, 720P, 480P and 480I formats.
34. The apparatus of claim 24 wherein said first video format is selected from the group consisting of 1080I, 720P, 480P and 480I formats.
35. The apparatus of claim 21 further comprising an analog tuner for receiving an analog television signal.